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DATE: 03/25/2002 8.5

PATENT APPLICATION: US/09/884,465A

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3 <110> APPLICANT: Shire Biochem, Inc.
4 Hamel, Josee
5 Brodeur, Bernard
6 Martin, Denis
7 Charland, Nathalie
8 Ouellet, Catherine
10 <120> TITLE OF INVENTION: Streptococcus Antigens
12 <130> FILE REFERENCE: 055190-0044
14 <140> CURRENT APPLICATION NUMBER: 09/884,465A
15 <141> CURRENT FILING DATE: 2001-06-20
17 <150> PRIOR APPLICATION NUMBER: 60/212,683
18 <151> PRIOR FILING DATE: 2000-06-20
20 <160> NUMBER OF SEQ ID NOS: 384
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441 acattgatag tctcttgaaa cagctctaca aactgccttt gagtcaacgc catgtagaat 960
443 ctgatggcct tattttcgac ccagcgcaaa tcacaagtcg aaccgccaga ggtgtagctg 1020
445 tccctcatgg taaccattac cactttatcc cttatgaaca aatgtctgaa ttggaaaaac 1080
447 gaattgctcg tattattccc ctctgttatc gttcaaacca ttgggtacca gattcaagac 1140
449 cagaagaacc aagtcacaaa ccgactccag aacctagtc aagtcgcgaa cctgcaccaa 1200
451 atcctcaacc agctccaagc aatccaattg atgagaaatt ggtcaaagaa gctgttcgaa 1260
453 aagtaggcga tggttatgtc tttgaggaga atggagtttc tcgttatatc ccagccaaga 1320
455 atctttcagc agaaacagca gcaggcattg atagcaaaact ggccaagcag gaaagtttat 1380
457 ctcataagct aggagctaag aaaactgacc tccatctag tgatcgagaa ttttacaata 1440
459 aggccttatga cttactagca agaattcacc aagatttact tgataataaa ggtcgacaag 1500

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 03/25/2002

PATENT APPLICATION: US/09/884,465A

TIME: 10:40:52

Input Set : A:\55190-0044 Sequence listing 03-11-2002.txt

Output Set: N:\CRF3\03252002\I884465A.raw

L:2569 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (74) SEQUENCE:
L:2585 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (75) SEQUENCE:
L:2601 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (76) SEQUENCE:
L:2617 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (77) SEQUENCE:
L:2633 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (78) SEQUENCE:
L:2649 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (79) SEQUENCE:
L:2665 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (80) SEQUENCE:
L:2681 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (81) SEQUENCE:
L:2697 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (82) SEQUENCE:
L:2713 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (83) SEQUENCE:
L:2729 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (84) SEQUENCE:
L:2745 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (85) SEQUENCE:
L:2761 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (86) SEQUENCE:
L:2777 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (87) SEQUENCE:
L:2793 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (88) SEQUENCE:
L:2809 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (89) SEQUENCE:
L:2825 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (90) SEQUENCE:
L:2841 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (91) SEQUENCE:
L:2857 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (92) SEQUENCE:
L:2873 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (93) SEQUENCE:
L:2889 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (94) SEQUENCE:
L:2905 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (95) SEQUENCE:
L:2921 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (96) SEQUENCE:
L:2937 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (97) SEQUENCE:
L:2953 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (98) SEQUENCE:
L:2969 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (99) SEQUENCE:
L:2985 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (100) SEQUENCE:
L:3001 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (101) SEQUENCE:
L:3017 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (102) SEQUENCE:
L:3033 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (103) SEQUENCE:
L:3049 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (104) SEQUENCE:
L:3065 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (105) SEQUENCE:
L:3081 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (106) SEQUENCE:
L:3097 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (107) SEQUENCE:
L:3113 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (108) SEQUENCE:
L:3129 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (109) SEQUENCE:
L:3145 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (110) SEQUENCE:
L:3161 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (111) SEQUENCE:
L:3177 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (112) SEQUENCE:
L:3193 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (113) SEQUENCE:
L:3209 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (114) SEQUENCE:
L:3225 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (115) SEQUENCE:
L:3241 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (116) SEQUENCE:
L:3257 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (117) SEQUENCE:
L:3273 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (118) SEQUENCE:
L:3289 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (119) SEQUENCE:
L:3305 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (120) SEQUENCE:
L:3321 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (121) SEQUENCE:

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/884,465A

DATE: 03/25/2002

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Input Set : A:\55190-0044 Sequence listing 03-11-2002.txt

Output Set: N:\CRF3\03252002\I884465A.raw

L:3337 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (122) SEQUENCE:
L:3353 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (123) SEQUENCE:
L:16266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:376
L:16370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:376
L:16546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:377
L:16686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:377
L:16826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:378
L:16966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:378
L:17206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:379
L:17290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:379
L:17526 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:380
L:17666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:380
L:17842 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:381
L:17946 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:381
L:18186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:382
L:18322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:382
L:18562 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:383
L:18698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:383
L:18874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:384
L:18958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:384